

Ingestion-Dermal Absorption Standards

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Compounds Evaluated for Dermal Absorption Pathway

Arsenic
Benzo(a)pyrene
Cadmium
Chlordane
DDT
Lindane
PAHs
Pentachlorophenol
Semi-volatile organic compounds

Combined Ingestion-Dermal Absorption Pathway

- Acknowledges that concurrent exposure occurs via dermal and ingestion pathways
- Consistent with EPA
- Combined pathways employ same target risk as other individual pathways
- Of 145 chemicals, about half have a dermal component and will have lower standards than our current SCC levels

The Nonresidential Scenario Is Changed

- Using EPA's outdoor worker scenario for the nonresidential standards, rather than the indoor worker used in the current Soil Cleanup Criteria
- Outdoor worker scenario is less conservative

Toxicity Information Is Updated

- New toxicity information has been incorporated according to an established hierarchy
- As a result, chemicals with new toxicity data will have different standards than our current Soil Cleanup Criteria levels

Alternative Remediation Standards Are Limited

- Advancements in methodology, such as new toxicity or exposure information, improved or advanced models and methods
- Appropriate site-specific default parameters
- Different land use determinations such as recreational or trespasser scenarios

Compliance With Ingestion-Dermal Standards

- All sampled contaminants that exceed their relevant ingestion-dermal absorption standard must be remediated
- Site wide averaging is **not** routinely accepted, except on a case-by-case basis when sampling is deemed to be representative of the contaminant concentrations across the site

Compliance With Ingestion-Dermal Standards

- Compliance averaging over an area of concern is allowed
- Averaging of sporadic low levels of contaminants with no discernable source area and minimal exceedances of a standard during post excavation sampling are allowed